



DISABILITY AND COMMUNICATION ACCESS BOARD

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SITE SPECIFIC ALTERNATE DESIGN

Pursuant to §103-50, Hawaii Revised Statutes (HRS), all buildings and facilities constructed by, or on behalf of the State or any county, shall conform to the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and amendments. In accordance to HRS §103-50 and Chapter 11-217, Hawaii Administrative Rules, the Disability and Communication Access Board has authority to issue interpretive opinions to HRS §103-50 design standards.

Docket: **DCAB 2002-04:** Request for a site-specific alternate design on ADAAG 4.5 Ground and Floor Surfaces and 4.3 Accessible Route. Request to substitute a five-foot-wide wood walkway from a restroom to a pavilion at Kahalu'u Beach Park on the Big Island, with the use of a five-foot-wide walkway made of wood-plastic composite planks called *TREX*.

Summary: According to product literature, the decking is made of a wood-plastic composite made primarily from equal parts reclaimed hardwood sawdust and reclaimed/recycled polyethylene plastic. Heavier and more flexible than wood, boards have no grain that can split or crack due to fasteners; does not split, warp or splinter like wood. **Dimensions:** five-foot-wide walkway constructed of 2-inch-high by 6-inch-deep members spaced 3/16-inch max. System is supported by concrete at 10-feet-on-center and set flush on sand or ground. **Installation:** the space between the decking would be filled with sand and sit flush on the sand, resulting in a sound walkway. Decking must be supported every two feet on center, installed properly gapped (1/4 inch), and directly and level on joists. Gapping is necessary to allow for drainage and cleaning and also to allow for slight thermal expansion and contraction. **Load:** though tough and durable, decking doesn't have the stiffness needed for use as load-bearing columns, posts, joists, stringers, or beams. Must not be attached to any solid surface or water-tight system such as sheathing, waterproof membranes, concrete, roof systems, or patios. Because of its flexibility, decking will conform to uneven joists. **Traffic:** depending on board sizes & center-to-center decking spans, usable for residential decks, light duty docks, commercial decks, boardwalks, & marinas. **Maintenance:** periodic sweeping and hosing of the deck assists in removal of mold and mildew that feed on debris, dirt, plant material or other food sources remaining on the deck; mildew does not affect decking performance, and is an aesthetic issue only. Can be painted or stained. Desirable color fading due to eight- to twelve-week exposure to sunlight and rain is harmless and does not affect durability; hosing down with garden hose may accelerate weathering process. Phosphoric acid bases remove rust or dirt and household degreasing agents remove grease and oil stains. Sufficient gapping keeps water from puddling, and any blockages are cleanable with a flat tool.

Previous installation in mid-1999 of this system at Kahalu'u Beach Park was located 30 feet from the shoreline. Only maintenance required after high waters covered the park involved surface sand removal.

Ruling: For buildings or facilities subject to HRS § 103-50,

ADAAG 4.3.6 Surface Textures, and 4.5.1 Ground and Floor Surfaces

A request for a site-specific alternate design is GRANTED for the installation of a five-foot-wide walkway from a restroom to a pavilion at Kahalu'u Beach Park on the Big Island, made of wood-plastic composite planks called *TREX* in substitution for a five-foot-wide wood walkway.

New construction or major alteration involving walkways for the Kahalu'u Beach Park shall comply with 4.5 Ground and Floor Surfaces and 4.3 Accessible Route.

[Rul: 09/02] (Auth and Imp: HRS §103-50)

If you have any questions or comments regarding this ruling, please call us at 586-8121.